

GRANTED

(IN296365)

## Sulfoximine compounds as anticancer agents



### NEED

Chemotherapy often fails due to drug resistance, leading to 90% treatment failure in metastatic cancers. Traditional drugs target only one pathway, leaving tumors room to adapt. But what if a compound blocked multiple mechanisms—without harming healthy cells?

### TECHNOLOGY OVERVIEW

This invention discloses a new class of sulfoximine-based compounds with anticancer activity. These molecules feature tailored functional groups to enhance binding with multiple cancer cell targets. Their structure enables diverse interactions, boosting efficacy and lowering resistance in solid tumors.

### TECHNOLOGY KEY FEATURES

Multitargeting sulfoximine scaffolds; novel regioisomers and stereoisomers; 20+ derivatives synthesized for structure-activity tuning; robust synthesis route; potential to reduce resistance-linked failure by over 50%.

[Read more here](#)

### MARKET ANALYSIS

The global oncology drugs market is projected to grow at a CAGR of 6.9%, reaching \$393B by 2033. India's oncology market is growing at 12.5% CAGR, driven by rising cancer incidence and generic innovation. (Source: Fortune Business Insights, ResearchAndMarkets)

### Target Industries

Pharma Formulation Firms: To develop next-gen anticancer drugs with novel mechanisms. Oncology Research Institutes: For in vivo validation and clinical trials of multitargeting therapies. Specialty Drug Manufacturers: To co-develop sulfoximine-based molecules for niche cancers like pancreatic or glioblastoma.

### AT A GLANCE

- SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation and Infrastructure)

Technology is available for licensing/ co-development.

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